

Midwest Region GIS Technical Support Center (MW-RTSC)
Selected activities/accomplishments during FY-2002

Regional GIS support is provided by the Midwest Region Technical Support Center (MW-RTSC) located at the University of Wisconsin-Madison. Staff and resources (GIS software/hardware) are available to address issues related to developing and maintaining GIS capabilities both at the park-based level and throughout programmatic functions in the Regional Office. The following are highlighted activities and accomplishments for Fiscal Year 2002.

- Worked closely with National Trails System staff in the planning, preparation, and presentation of a day-long program on GIS and data management as it related to NPS and partner trails. Significant emphasis was placed on access to available tools and the adoption of usable data standards.
- Supported Heartland I&M Network office's efforts to develop historic orthophotographs for LIBO and creation of DRG and DOQQ MrSid mosaics for all Heartland Network parks.
- Devoted considerable time and attention to integration of regional GIS activities with Lands cartographic efforts. Served as liaison between Regional Lands Division and BLM personnel working to develop a cadastral layer for VOYA. Project focused on options for converting existing "segment" maps to a softcopy GIS/CAD environment.
- Worked extensively with Prairie Cluster LTEM office staff to continue development of protocols to interpret historical aerial photography for emerging land use change protocol. Co-presented paper on topic at this year's ESRI GIS User's Conference.
- Assisted Apostle Islands National Lakeshore Wilderness Suitability Study. The Lakeshore is currently evaluating the possibility of adding land to the National Wilderness Preservation System. GIS data prepared by MW-RTSC were used to analyze and compose a series of alternatives for wilderness protection. Maps for these alternatives were included in a workbook that was widely distributed for public comment.
- Developed base layers for servicewide ArcIMS application. The National Park Service recently constructed an ArcIMS application that includes park boundaries, trails, and wilderness areas for every park in the NPS system. Most of the 56 parks in the Midwest Region did not have boundary and trails data in a digital format. In response, our office compiled and prepared data for the Midwest parks for inclusion in the national ArcIMS application.
- Created and distributed a general set of tools for ArcGIS to use and manipulate FGDC compliant metadata. The tools allow users do the following: 1) import metadata and data sets from legacy systems into ArcGIS, 2) examine and fix metadata errors, and 3) easily search metadata. Additionally, the tools handle several errors in ArcGIS's handling of metadata. Made tools available on Midwest Region's web site.
- Conducted GPS mapping efforts at Effigy Mounds National Monument and Pea Ridge National Military Park. As part of the respective projects, developed data dictionaries, completed field data collection, and post-processing of data resulting in a variety of basemap data sets.

- Assisted Fire Management program at Effigy Mounds National Monument by providing Resource Management products to assist with their Fire Management Plan (FMP), Prescribed Fire Plans, and national fire occurrence reports. Products included GIS coverages, maps, and spreadsheets. Coverages that were created included: fire management zones, burn units and historic fire perimeters (fire history) that were used in conjunction with other park GIS data to produce FMP, burn plan, and Wildland-urban interface project proposal maps. Look-up tables for locations of burn units in degrees, minutes, and seconds were also created for fire reporting.
- Assembled geospatial data for the Eastern Area (CT, DE, IL, IN, IA, ME, MD, MA, MI, MN, MO, NH, NJ, NY, OH, PA, RI, VT, WV, WI) and created an ArcView 3.x project for Eastern Area Coordination Center (EACC) in St. Paul, MN. The EACC provides logistical support, resources, and intelligence for federal and state wildland fire agencies. The ArcView project provided the Predictive Services division a tool to manage their data and create images for their website. These ArcView-created images (used as links) help serve up regional and local fire weather forecasts, daily remote automated weather station (RAWS) national fire danger rating system (NFDRS) reports, real-time weather observations and analyses, and drought indices. Eastern Area large-format maps created from the ArcView project will also aid in the dispatch of resources to support wildland fire suppression.
- Created Fire GIS/GPS Intranet site for InsideNPS that provides general GIS, GPS, and fire-specific geospatial information to the NPS fire community. The site also provides information on NPS, interagency, and private sector training, upcoming events, web links, and NPS fire GIS personnel contact information.
- As a member of the Fire GPS training cadre, created training materials and helped teach a federal interagency fire course, "GPS for the Incident Command System."
- Created a GPS-user guidebook and Power Point Presentation that details pre-field, field, and post-field operations using the Garmin GPS III Plus receiver, Waypoint + software, ArcView 3.x and the AVGarmin ArcView extension.
- Participated as a GIS Technical Specialist on a National Fire Use Management Team.